IN THE CLAIMS:

Please find below a listing of all pending claims. The statuses of the claims are set forth in parentheses. For those currently amended claims, underlined emphasis indicates insertions and ~~strikethrough~~ emphasis (and/or double brackets) indicates deletions.

1. (currently amended) A control packet processing apparatus for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among devices that support a spanning tree protocol, comprising:

a receiving device ~~receiving~~ configured to receive the control packet;

a buffer device ~~storing~~ configured to store the received control packet; and

a control device configured to autonomously ~~transferring~~ transfer the control packet stored in the buffer device to a processing unit in a specific cycle when no control packet is received for a specific period, thereby preventing the processing unit from re-configuring a topology of a spanning tree,

wherein the control device starts to transfer the control packet stored in the buffer device to the processing unit when the receiving device receives a control packet instructing transmission stoppage of the control packet.

2. (withdrawn) A control packet processing apparatus for receiving a first control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

a generation device generating a second control packet indicating stoppage of transmitting the first control packet when transmission of the first control packet is stopped; and

a transmitting device transmitting the generated second control packet to prevent the re-configuration of the communication route of a spanning tree protocol when a receiving side device receives no first control packet for a specific period.

3. (withdrawn) A control packet processing apparatus for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

an input device inputting an instruction to start an automatic transmission of a control packet; and

a transmitting device autonomously transmitting a control packet for a specific period at specific intervals according to the instruction from when a processing unit stops to output a control packet transmit request until the processing unit restarts to output the control packet transmit request.

4. (withdrawn) The control packet processing apparatus according to claim 3, wherein

said input device inputs stop instruction to stop the automatic transmission of the control packet, and

said transmitting device stops autonomously transmitting the control packet according to the stop instruction.

5. (withdrawn) The control packet processing apparatus according to claim 3, further comprising

a table processing device,

wherein

said transmitting device has a table storing a correspondence relationship between an address and a port of a frame transferred according to the spanning tree protocol, and

the table processing device discards a table flush instruction accompanying the re-configuration of the communication route of a spanning tree protocol while said transmitting device is autonomously transmitting the control packet.

6. (withdrawn) The control packet processing apparatus according to claim 3, which prevents another device from detecting a change in the communication route of a spanning tree protocol, and recovers the communication route just before the stoppage of an operation of the processing unit when the processing unit stops or restarts.

7. (withdrawn) The control packet processing apparatus according to claim 3, further comprising a receiving device normally receiving a control packet transmitted by another device while autonomously transmitting the control packet.

8. (withdrawn) The control packet processing apparatus according to claim 7, wherein

said transmitting device monitors a receiving situation of a control packet transmitted from the another device, and stops the transfer of a data frame according to the spanning tree protocol when a change is detected.

9. (withdrawn) The control packet processing apparatus according to claim 7, wherein

said transmitting device monitors a receiving situation of a control packet transmitted from the another device, and initializes the spanning tree protocol when a change is detected.

10. (withdrawn) The control packet processing apparatus according to claim 7, wherein

said transmitting device monitors a receiving situation of a control packet transmitted from the another device, and modifies contents of a control packet autonomously transmitted according to a changed contents when contents of the received control packet change.

11. (canceled).

12. (currently amended) The storage medium according to claim [[11]]13, wherein

said transferring includes generating a pseudo-receiving trigger indicating the reception of a control packet in the specific cycle from when an instruction to stop generating the pseudo-receiving trigger is received until an instruction to stop the generation of the trigger is received, and transferring the control packet stored in said buffer device to the processing unit every time the pseudo-receiving trigger is generated.

13. (currently amended) [[The]]A storage medium ~~according to claim 11, wherein~~on which is recorded a program for enabling the control packet processing apparatus to receive a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, said program comprising:

storing the received control packet in a buffer device; and

autonomously transferring the control packet stored in the buffer device to a processing unit in a specific cycle when no control packet is received for a specific period, thereby preventing the processing unit from re-configuring a topology of a spanning tree,

wherein said program enables said control packet processing apparatus to start said transferring of the control packet stored in the buffer device to the

processing unit when said control packet processing apparatus receives a control packet instructing transmission stoppage of the control packet.

14. (previously presented) The storage medium according to claim 13, wherein said transferring includes generating a pseudo-receiving trigger indicating the reception of a control packet in the specific cycle, and transferring the control packet stored in said buffer device to the processing unit every time the pseudo-receiving trigger is generated.

15. (previously presented) The storage medium according to claim 13, wherein said control packet processing apparatus receives a bridge protocol data unit and stores the received bridge protocol data unit as the control packet in said buffer device and the control packet instructing the transmission stoppage is a bridge protocol data unit containing a flag instructing a transmission stoppage.

16. (previously presented) The storage medium according to claim 13, wherein said control packet processing apparatus receives a bridge protocol data unit and stores the received bridge protocol data unit as the control packet in said buffer device and the control packet instructing the transmission stoppage is another control packet other than the bridge protocol data unit.

17. (previously presented) The storage medium according to claim 13, wherein when said control packet processing apparatus receives a control packet instructing transmission restart of the control packet, said program enables said control packet processing apparatus to stop said transferring.

18. (previously presented) The storage medium according to claim 17, wherein said control packet processing apparatus receives a bridge protocol data unit and stores the received bridge protocol data unit as the control packet in said buffer

device, the control packet instructing the transmission stoppage is a bridge protocol data unit containing a flag instructing transmission stoppage and the control packet instructing the transmission restart is a bridge protocol data unit containing a flag instructing transmission restart.

19. (previously presented) The storage medium according to claim 17, wherein said control packet processing apparatus receives a bridge protocol data unit and stores the received bridge protocol data unit as the control packet in said buffer device, and each of the control packet instructing the transmission stoppage and the control packet instructing the transmission restart is another control packet other than the bridge protocol data unit.

20. (previously presented) The storage medium according to claim 13, wherein when said control packet processing apparatus receives a subsequent control packet, said program enables said control packet processing apparatus to stop said transferring.

21. (withdrawn) A storage medium on which is recorded a program for enabling the control packet processing apparatus to receive a first control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, said program comprising:

generating a second control packet indicating stoppage of transmitting the first control packet when transmission of the first control packet is stopped; and

transmitting the generated second control packet to prevent the re-configuration of the communication route of a spanning tree protocol when a receiving side device receives no first control packet for a specific period.

22. (withdrawn) The storage medium according to claim 21, wherein

said control packet processing apparatus transmits a bridge protocol data unit as the first control packet to be transferred among bridge devices, and generates a bridge protocol data unit containing a flag instructing a transmission stoppage as the second control packet.

23. (withdrawn) The storage medium according to claim 21, wherein

said control packet processing apparatus transmits a bridge protocol data unit as the first control packet to be transferred among bridge devices, and generates another control packet other than the bridge protocol data unit as the second control packet.

24. (withdrawn) The storage medium according to claim 21, wherein

when restarting control packet transmission, said program enables said control packet processing apparatus to further perform generation of a control packet instructing transmission restart and transmission of the control packet instructing transmission restart.

25. (withdrawn) The storage medium according to claim 24, wherein

said control packet processing apparatus transmits a bridge protocol data unit as the first control packet to be transferred among bridge devices, generates a bridge protocol data unit containing a flag instructing transmission stoppage as the second control packet and generates a bridge protocol data unit containing a flag instructing transmission restart as the control packet instructing transmission restart.

26. (withdrawn) The storage medium according to claim 24, wherein

said control packet processing apparatus transmits a bridge protocol data unit as the first control packet to be transferred among bridge devices, and generates another control packet other than the bridge protocol data unit as both the second control packet and the control packet instructing transmission restart.

27. (withdrawn) The storage medium according to claim 21, wherein

said program enables said control packet processing apparatus to further restart the control packet transmission by transmitting a subsequent control packet.

28. (withdrawn) A storage medium on which is recorded a program for enabling the control packet processing apparatus to receive a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, said program comprising:

inputting an instruction to start an automatic transmission of a control packet; and

instructing a transmitting device to autonomously transmit a control packet for a specific period at specific intervals according to the instruction from when a processing unit stops to output a control packet transmit request until the processing unit restarts to output the control packet transmit request.

29. (withdrawn) A storage medium on which is recorded a program for enabling the control packet processing apparatus to receive a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, said program comprising

autonomously transmitting a control packet for a specific period at specific intervals according to an instruction to start an automatic transmission of the control packet from when a processing unit stops to output a control packet transmit request until the processing unit restarts to output the control packet transmit request.

30. (canceled).

31. (canceled).

32. (canceled).

33. (canceled).

34. (currently amended) A control packet processing method for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

receiving the control packet;

storing the received control packet in a buffer device; and

autonomously transferring the control packet stored in the buffer device to a processing unit in a specific cycle when no control packet is received for a specific period, thereby preventing the processing unit from re-configuring a topology of a spanning tree,

wherein the transferring of the control packet stored in the buffer device to the processing unit is started when receiving a control packet instructing transmission stoppage of the control packet.

35. (withdrawn) A control packet processing method for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

inputting an instruction to start an automatic transmission of a control packet; and

autonomously transmitting a control packet for a specific period at specific intervals according to the instruction from when a processing unit stops to output a

control packet transmit request until the processing unit restarts to output the control packet transmit request.

36. (currently amended) A control packet processing apparatus for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

receiving means for receiving the control packet;

buffer means for storing the received control packet; and

control means for autonomously transferring the control packet stored in the buffer means to a processing unit in a specific cycle when no control packet is received for a specific period, thereby preventing the processing unit from re-configuring a topology of a spanning tree,

wherein the control means starts to transfer the control packet stored in the buffer means to the processing unit when the receiving means receives a control packet instructing transmission stoppage of the control packet.

37. (withdrawn) A control packet processing apparatus for receiving a first control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

generation means for generating a second control packet indicating stoppage of transmitting the first control packet when transmission of the first control packet is stopped; and

transmitting means for transmitting the generated second control packet to prevent the re-configuration of the communication route of a spanning tree protocol when a receiving side device receives no first control packet for a specific period.

38. (withdrawn) A control packet processing apparatus for receiving a control packet including a cost value of a communication route and used to exchange a variety of information among bridge devices that support a spanning tree protocol, comprising:

input means for inputting an instruction to start an automatic transmission of a control packet; and

transmitting means for autonomously transmitting a control packet for a specific period at specific intervals according to the instruction from when a processing unit stops to output a control packet transmit request until the processing unit restarts to output the control packet transmit request.